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JPL CENTER FOR CLIMATE SCIENCES AND THE GLOBAL CLIMATE & ENERGY  
GROUP PRESENT:  
A WATER CYCLE & RESOURCES COLLOQUIUM & WORKSHOP SERIES

# LAND SURFACE HYDROLOGY RESEARCH AT THE UNIVERSITY OF WASHINGTON

**SPEAKER: DR. DENNIS  
LETTENMAIER**  
UNIVERSITY OF WASHINGTON



**FEBRUARY 13, 2012**  
**10.00-11.00 AM / 180-101**  
**ALSO BROADCAST LIVE ON JPL TV, CHANNEL 32**



I will summarize ongoing work at the University of Washington in three areas. 1) Simulation and prediction of Northern Eurasia methane emissions, which reflects a strong link between the carbon and water cycles. 2) Seasonal hydrologic forecasting and predictability, which primarily seeks to answer the question of whether global climate forecast models can exceed the skill inherent in knowing hydrologic initial conditions. 3) Surface water altimetry applications to water management. We have focused on two areas: flood forecasting in the transboundary Ganges-Brahmaputra River complex, and reconstruction of storage time histories of about 35 reservoirs, which account for 20 percent of the world's reservoir storage capacity.

Dennis P. Lettenmaier holds a B.S. in Mechanical Engineering and Ph.D. from the University of Washington, and an M.S. in Civil, Mechanical and Environmental Engineering from George Washington University. He joined the University of Washington faculty in 1976, was a visiting scientist at the U.S. Geological Survey (1985-1986) and was Program Manager of NASA's Land Surface Hydrology Program at NASA Headquarters from 1997 to 1998. Dr. Lettenmaier was a recipient of the American Society of Civil Engineers' Huber Research Prize in 1990 and the American Geophysical Union's Hydrology Section Award in 2000. His areas of research interest are large-scale hydrology, hydrologic aspects of remote sensing and hydrology-climate interactions.

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